

What is claimed is:

1. A color CRT having a panel of which outer surface is substantially flat and inner surface has a predetermined curvature and a funnel coupled to a
5 rear side of the panel,

wherein an aspect ratio of an effective surface (U) of the panel is 4:3, a diagonal size of the effective surface is 570mm ~ 700mm, and a following condition is satisfied:

$$-1.7168 \cdot \ln(U) + 11.627 \leq (R_h \cdot R_v \cdot R_o/U) \cdot T_c \leq -2.0131 \cdot \ln(U) + 13.645,$$

10 wherein a value obtained by dividing an inner curvature radius R_x of the effective surface of the panel following a long axis (X) by a distance L_x of the effective surface of the panel following a 1.767*long axis is R_h , a value obtained by dividing an inner curvature radius R_y of the effective surface of the panel following a short axis (Y) by a distance L_y of the effective surface following a 1.767*short axis is R_v , a value obtained by dividing an inner curvature radius of the effective surface of the panel following a diagonal axis (D) by a distance L_d of the effective surface following 1.767*diagonal axis is R_o , and the thickness of the center point of the panel 100 is T_c .

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20 2. The CRT of claim 1, wherein a following condition is satisfied:
10mm $\leq T_c \leq$ 12.4mm.

25 3. The CRT of claim 1, wherein a following condition is satisfied:
 $0.0875 \cdot \ln(U) - 0.4192 \leq OAH/U \leq 0.0981 \cdot \ln(U) - 0.4753$, and a tube axis directional distance from the center of the outer surface of the panel to a seal edge line is

OAH.

4. A color CRT having a panel of which outer surface is substantially flat and inner surface has a predetermined curvature and a funnel coupled to a
5 rear side of the panel,

wherein an aspect ratio of an effective surface of the panel is 16:9, a diagonal size of the effective surface is 650mm ~ 760mm, a following condition is satisfied: $-2.1319*Ln(U)+14.589 \leq (Rh*Rv*Ro)/U * Tc \leq -2.5462*Ln(U)+17.414$,

wherein a value obtained by dividing an inner curvature radius Rx of the
10 effective surface of the panel following a long axis (X) by a distance Lx of the effective surface of the panel following a 1.767*long axis is Rh, a value obtained by dividing an inner curvature radius Ry of the effective surface of the panel following a short axis (Y) by a distance Ly of the effective surface following a 1.767*short axis is Rv, a value obtained by dividing an inner curvature radius of
15 the effective surface of the panel following a diagonal axis (D) by a distance Ld of the effective surface following 1.767*diagonal axis is Ro, and the thickness of the center point of the panel 100 is Tc.

5. The CRT of claim 4, wherein a following condition is satisfied:
20 $11mm \leq Tc \leq 13.4mm$.

6. The CRT of claim 4, wherein a following condition is satisfied:
-0.0567*Ln(U)+0.5119 $\leq OAH/U \leq -0.0485*Ln(U)+0.4711$, and a tube axis
directional distance from the center of the outer surface of the panel to a seal edge
25 line is OAH.

7. A color CRT having a panel of which outer surface is substantially flat and inner surface has a predetermined curvature and a funnel coupled to a rear side of the panel,

wherein an aspect ratio of an effective surface (U) of the panel is 4:3, a 5 diagonal size of the effective surface is 400mm ~ 500mm, and a following condition is satisfied:

$$-0.8629 \cdot \ln(U) + 5.6754 \leq (R_h \cdot R_v \cdot R_o) / U \cdot T_c \leq -1.0547 \cdot \ln(U) + 6.9366,$$

wherein a value obtained by dividing an inner curvature radius R_x of the effective surface of the panel following a long axis (X) by a distance L_x of the 10 effective surface of the panel following a 1.767*long axis is R_h , a value obtained by dividing an inner curvature radius R_y of the effective surface of the panel following a short axis (Y) by a distance L_y of the effective surface following a 1.767*short axis is R_v , a value obtained by dividing an inner curvature radius of the effective surface of the panel following a diagonal axis (D) by a distance L_d of the 15 effective surface following 1.767*diagonal axis is R_o , and the thickness of the center point of the panel 100 is T_c .

8. The CRT of claim 7, wherein a following condition is satisfied:

$$9 \text{mm} \leq T_c \leq 11.5 \text{mm}.$$

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9. The CRT of claim 7, wherein a following condition is satisfied:

$$0.096 \cdot \ln(U) - 0.4322 \leq OAH/U \leq 0.1052 \cdot \ln(U) - 0.4778, \text{ and a tube axis directional distance from the center of the outer surface of the panel to a seal edge line is OAH.}$$

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10. A color CRT having a panel of which outer surface is substantially flat and inner surface has a predetermined curvature and a funnel coupled to a rear side of the panel,

wherein the center transmittance of an effective surface (U) of the panel is

5 45% ~ 75%, a diagonal size of the effective surface is 650mm ~ 700mm, and a following condition is satisfied:

$$-17.746 \cdot \ln(U) + 116.49 \leq (R_h \cdot R_v \cdot R_o) / U \cdot T_c \leq -20.322 \cdot \ln(U) + 133.45,$$

wherein a value obtained by dividing an inner curvature radius R_x of the effective surface of the panel following a long axis (X) by a distance L_x of the

10 effective surface of the panel following a 1.767*long axis is R_h , a value obtained by dividing an inner curvature radius R_y of the effective surface of the panel following a short axis (Y) by a distance L_y of the effective surface following a 1.767*short axis is R_v , a value obtained by dividing an inner curvature radius of the effective surface of the panel following a diagonal axis (D) by a distance L_d of the effective surface following 1.767*diagonal axis is R_o , and the thickness of the 15 center point of the panel 100 is T_c .

11. The CRT of claim 10, wherein the thickness at the edge portion of the panel is equal to or smaller than 25mm.

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12. The CRT of claim 10, wherein a following condition is satisfied:
10mm $\leq T_c \leq 13.4\text{mm}.$